

DETAILED ACTION

1. Claims 16-21, 25, 26, 35-40, 42, 44, 46-56, 58 and 60-63 are presented for examination.

Response to Arguments

2. Applicant's arguments, see Appeal Brief, filed 07/28/2008, with respect to the rejection(s) of claim(s) 16-21, 25, 26, 35-40, 42, 44, 46-56, 58 and 60-63 under 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Kenner and Haeri.

Claim Objections

3. Claims 36, 42, 47 and 48 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.
4. Claims 36, 42, 47 and 48 teach a processor that is "adapted to" perform a claim limitation. This type of language does not further limit the claims since the processor never performs the claim limitation, it only has the capability perform the limitation and therefore one can state that if an invention utilized the same type of processor as the Applicant, then the processor "can" perform the intended limitation, i.e., not a positively recited claim and is only an intended use claim. The Objection will be lifted if the Applicant states the claim processor actually performing the limitations as stated in the above claims not just being able to do so.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 16 – 21, 35, 36, 39, 40, 42, 49, 52, 53, 54, 58, 61 and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenner et al. (6112239) (hereinafter Kenner) in view of Haeri et al. (6604241), hereinafter Haeri.

7. Referencing claim 16, as closely interpreted by the Examiner, Kenner teaches a method for enabling a receiver in a digital subscriber network to request services, the method comprising the steps of:

8. receiving, at a receiver, a dynamic network information table inserted within a transport stream from a first device, (e.g., col. 16, lines 43 – 67); and

9. the dynamic network information table including an upstream subtable, (e.g., col. 16, lines 43 – 67);

10. the first device positioned in the digital subscriber network upstream with respect to the receiver, (e.g., col. 16, lines 43 – 67 & col. 17, line 44 – col. 18, line 29 “MSP/redirection server”),

11. the upstream subtable including information associated with transmission characteristics of one or more devices positioned in the digital subscriber network upstream with respect to the first device, (e.g., col. 16, lines 43 – 67 & col. 17, line 44 – col. 18, line 29);
12. transmitting a request for a service, the requested service including at least a portion of the information included in the dynamic network information table, (e.g., col. 16, lines 43 – 67 & col. 17, line 44 – col. 18, line 29), but does not specifically teach the dynamic network information table including a device-specific subtable;
13. the device-specific subtable including information associated with transmission characteristics of the first device, the first device positioned in the digital subscriber network upstream with respect to the receiver. It could be argued that the redirection server of Kenner would have to send an address of some sort to communicate with the user and that could be considered a “transmission characteristic” but the address of the first device is not explicitly stated.
14. Haeri teaches the dynamic network information table including a device-specific subtable, (e.g., col. 15, line 55 - col. 16, line 35 et seq., The ability to send a "Get" command and receive routing table entries from a first router that would also have what routing characteristics of other routers which is the essence of a routing table.);
15. the device-specific subtable including information associated with transmission characteristics of the first device, the first device positioned in the digital subscriber network upstream with respect to the receiver, (e.g., col. 15, line 55 - col. 16, line 35 et seq.).
16. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Haeri's ability to specifically request parameters from all nodes in their

network with Kenner's specific teachings of sublists that include device specific information on which device can accommodate a specific user's request because it would give the user the ability to determine which node in the network would be best suited for the request if the user had all the information needed to make the determination, see Kenner, column 18, lines 53 et seq.

17. Referencing claim 17, as closely interpreted by the Examiner, Kenner teaches identifying from the dynamic network information table and upstream device associated with the requested service, (e.g., col. 16, lines 43 – 67 & col. 17, line 44 – col. 18, line 29); and

18. including the identification of the upstream device in the transmitted request for the service, (e.g., col. 16, lines 43 – 67 & col. 17, line 44 – col. 18, line 29).

19. Referencing claim 18, as closely interpreted by the Examiner, Kenner teaches identifying a controller associated with the identified upstream device, (e.g., col. 16, lines 43 – 67 & col. 17, line 44 – col. 18, line 29 MSP);

20. wherein transmitting the request for the service includes transmitting the request to the controller, (e.g., col. 16, lines 43 – 67 & col. 17, line 44 – col. 18, line 29 MSP).

21. Referencing claim 19, as closely interpreted by the Examiner, Kenner teaches determining a communication path through the digital subscriber network for the requested service, (e.g., col. 18, line 30 – col. 19, line 50, Mapping the user's IP address to an IP address of a node that can accommodate the user in the same network.); and

22. including the communication path in the transmitted request for the service, (e.g., col. 18, line 30 – col. 19, line 50).

23. Referencing claim 20, as closely interpreted by the Examiner, Kenner teaches the communication path is determined based upon network information included in the received dynamic network information table, (e.g., col. 18, line 30 – col. 19, line 50).

24. As per claim 21, as closely interpreted by the Examiner, Kenner does not specifically teach the dynamic network information table includes available bandwidth of at least one upstream communication link in the digital subscriber network. Haeri teaches the dynamic network information table includes available bandwidth of at least one upstream communication link in the digital subscriber network, (e.g., col. 16, lines 10 - 36). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Haeri with Kenner because sending bandwidth data between servers and client while setting up a connection would set the parameters of the network connections so that proper allocation of bandwidth can be utilized across the network devices.

25. Claims 35, 36, 39, 40, 42, 49, 52, 53, 54, 58, 61 and 63 are rejected for similar reasons as stated above.

26. **Claims 25, 26, 37, 38, 50 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenner and Haeri in further view of Rakib et al. (6889385), hereinafter Rakib.**

27. Referencing claim 25, as closely interpreted by the Examiner, Kenner and Haeri do not specifically teach the dynamic network information table is included in a packet having a reserved packet identifier associated therewith.

28. Rakib teaches the dynamic network information table is included in a packet having a reserved packet identifier associated therewith, (e.g., col. 10, line 23 – col. 11, line 11). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Rakib with the combine inventions of Kenner and Haeri because utilizing packet identifiers allows a system to identify specific streams of packets to a specific request and therefore resolve the request in the system.

29. Referencing claim 26, as closely interpreted by the Examiner, Kenner and Haeri do not specifically teach the packet is a program association table packet. Rakib teaches the packet is a program association table packet, (e.g., col. 10, line 23 – col. 11, line 11). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Rakib with the combine inventions of Kenner and Haeri since utilizing a program association table packet in a set-top-box network allows the system to associate specific identification numbers with specific programs which further allows for smaller packets since the entire program is not requested only a small number, PIDs.

30. Referencing claim 37, as closely interpreted by the Examiner, Kenner and Haeri do not specifically teach the second transport stream includes multiple elementary streams of the first transport stream. Rakib teaches the second transport stream includes multiple elementary streams of the first transport stream, (e.g., col. 38, line 52 – col. 39, line 24, “*channels and subchannels*”). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Rakib with the combine inventions of Kenner and Haeri because utilizing smaller subchannels allows for a more specific response from the main channels, i.e. channels that share the same traits, sports, news, etc.

31. Referencing claim 50, as closely interpreted by the Examiner, Kenner and Haeri do not specifically teach the network information includes a transport stream identifier (TSID) for the received transport stream. Rakib teaches the network information includes a transport stream identifier (TSID) for the received transport stream, (e.g., col. 10, line 43 – col. 11, line 11). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Rakib with the combine inventions of Kenner and Haeri because of similar reasons stated above.

32. Claim 51 is rejected for similar reasons as stated above.

33. Claims 44, 46, 47, 60 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenner and Haeri in view of Nobakht et al. (6813639) (hereinafter Nobakht).

34. As per claim 44, as closely interpreted by the Examiner, Kenner and Haeri do not specifically teach the first dynamic network information table is included in a program association table of the first transport stream. Nobakht teaches the first dynamic network information table is included in a program association table of the first transport stream, (e.g. col. 11, lines 29 – 64 & Figure 10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Nobakht with the combine inventions of Kenner and Haeri because of similar reasons stated above.

35. As per claim 46, as closely interpreted by the Examiner, Kenner and Haeri do not specifically teach the second dynamic network information table is included in a program association table of the second transport stream. Nobakht teaches the second dynamic network information table is included in a program association table of the second transport stream, (e.g. col. 11, lines 29 – 64 & Figure 10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Nobakht with the combine inventions of Kenner and Haeri because of similar reasons stated above.

36. As per claim 47, as closely interpreted by the Examiner, Kenner teaches the transmitter is a plurality of transmitters, each transmitter having an identifier associated therewith, and the

processor is adapted to create a dynamic network information table having a transmitter identifier included therein for each transmitter, (e.g., col. 18, line 30 – col. 19, line 50, IP address).

37. Claims 60 and 62 are rejected for similar reasons as stated above.

38. Claims 48 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenner and Haeri in view of Nakamura et al. (5913039) (hereinafter Nakamura).

39. As per claim 48, as closely interpreted by the Examiner, Kenner and Haeri do not specifically teach the processor is further adapted to monitor the first communication link and respond to changes in the first communication link by generating an alert message and sending the alert message to the transmitter, wherein the transmitter transmits the alert message through the second communication link.

40. Nakamura teaches the processor is further adapted to monitor the first communication link and respond to changes in the first communication link by generating an alert message and sending the alert message to the transmitter, wherein the transmitter transmits the alert message through the second communication link, (e.g. col. 10, line 28 – col. 11, line 13 & col. 11, line 35 – col. 12, line 7). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Nakamura with the combine inventions of Kenner and Haeri because once the server control unit gives the signal to the transmission video name in the transmission schedule table in job scheduling storage unit, the timer of the client in alarm

interrupt unit starts and therefore aiding in the scheduling of which data streams to store in a device.

41. Claim 56 is rejected for similar reasons as stated above.

42. Claim 55 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kenner and Haeri in view of Pecus et al. (6886029) (hereinafter Pecus).

43. As per claim 55, Kenner and Haeri do not specifically teach the network information includes bit error information. Pecus teaches the network information includes bit error information, (e.g., col. 30, lines 5 – 19). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Pecus with the combine inventions of Kenner and Haeri because utilizing a bit error rate allows the users node identify when a transmission is not complete and what packets need to be re-transmitted therefore allowing a complete transmission.

Conclusion

44. Applicant is invited to contact the Examiner to resolve any issues and further prosecution over a phone interview.

45. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

46. a. Guo U.S. Pub. No. 2004/0225846 discloses Method and system for scheduled activation of system information tables in digital transport streams.
47. b. Levy et al. U.S. Pub. No. 2002/0162118 discloses Efficient interactive TV.
48. c. Mochizuki et al. U.S. Patent No. 7024487 discloses Assistant server and path connection control method for service provider's network.
49. d. Ikeda U.S. Patent No. 6999991 discloses Push service system and push service processing method.
50. e. Salam et al. U.S. Patent No. 6594654 discloses Systems and methods for continuously accumulating research information via a computer network.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID E. ENGLAND whose telephone number is (571)272-3912. The examiner can normally be reached on Mon-Thur, 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tonia Dollinger can be reached on 571-272-4170. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

David E. England
Examiner
Art Unit 2443

/D. E. E./
Examiner, Art Unit 2443

/Tonia LM Dollinger/
Supervisory Patent Examiner, Art Unit 2143